

## I CLAIM

1. A multifunctional rail-style wall combined by mortising comprising cases and bricks with tenons and mortises, said case or said brick with tenons and  
5 mortises shaped rectangular, said case or brick having an upper and a lower surface and four circumferential sides, said upper and said lower surface of said case or brick respectively provided with at least one lengthwise first tenon and one lengthwise first mortise, said first tenon  
10 and said first mortise respectively extending from the edge of one of said circumferential sides to the edge of the opposite circumferential side, every two of said cases or said bricks able to be combined together by engaging said tenons with said mortises, said case with  
15 said tenons and mortises formed with a hollow in its interior, said brick with said tenons and mortises being solid or hollow, said cases or said bricks able to be combined into walls of different shapes, needless to use mortar, slurry or other adhesives for bonding.

20 2. The multifunctional rail-style wall combined by mortising as claimed in Claim 1, wherein said case with said tenons and mortises has its hollow provided on the inner walls with reinforced ribs preset in shape.

25 3. The multifunctional rail-style wall combined by mortising as claimed in Claim 1, wherein said case with said tenons and mortises has its upper surface bored with at least one pouring hole communicating with said

hollow for plastic material to be poured therethrough in said hollow.

4. The multifunctional rail-style wall combined by mortising as claimed in Claim 1, wherein said case and  
5 said brick respectively have said two lengthwise sides near the upper or the lower surface respectively provided with a wing extending outward horizontally to be fixed on the ground or under the roof by fasteners.

5. The multifunctional rail-style wall combined by  
10 mortising as claimed in Claim 1, wherein said case and said brick respectively have one of said lengthwise sides bored with a vertical pipe groove preset in shape at an intermediate portion, and four corners of said four circumferential sides are respectively formed with a  
15 vertical cut face to match with said pipe groove, said pipe grooves together with said cut faces of said cases or bricks making up a pipe passageway for fitting pipes therein after said cases or bricks are combined together in an interposing pattern.

20 6. The multifunctional rail-style wall combined by mortising as claimed in Claim 1, wherein if said brick is hollow, pipes are in advance provided in its hollow and also in the hollow of said case.

7. The multifunctional rail-style wall combined by  
25 mortising as claimed in Claim 1, wherein said case and said brick respectively have said two lengthwise sides respectively provided with at least one vertical tenon

and one vertical mortise respectively extending from the edge of said upper surface to the edge of said lower surface to enable two cases or two bricks to be combined alongside with each other so as to build a wall with a  
5 thickness of two rows of said cases or bricks.

8. The multifunctional rail-style wall combined by mortising as claimed in Claim 1, wherein a plate can be slidably fitted between said first mortises of said cases or bricks secured under the roof and on the ground or  
10 between a left and a right wall.

9. The multifunctional rail-style wall combined by mortising as claimed in Claim, wherein said plate contains mainly mica and partially other minerals and chemical materials, and is compressed in shape by  
15 machinery.

10. The multifunctional rail-style wall combined by mortising as claimed in Claim 1, wherein said case and said brick respectively have at least one second mortise provided in said surface with said first mortise  
20 and positioned perpendicular to said first mortise so that said brick with said second mortise can be vertically combined with another said brick to build a vertical wall.

11. The multifunctional rail-style wall combined  
25 by mortising as claimed in Claim 9, wherein said first tenon, said first mortise and said second mortise can be shaped into any geometrical shape, such as a V shape, a

semi-circle shape, a U shape or a  $\Omega$  shape.

12. The multifunctional rail-style wall combined  
by mortising as claimed in Claim 1, wherein said case  
with tenons and mortises is made of a plate, which is cut  
5 and processed.

13. The multifunctional rail-style wall combined  
by mortising as claimed in Claim 1, wherein after said  
plate is cut and processed to make said cases with tenons  
and mortises, remaining waste material of said plate can  
10 be recycled for making said bricks.

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